CORRECTED VERSION TO 05 APR 2005
Hecco Pet 10 / 50 2073

## (19) World Intellectual Property Organization International Bureau

## (43) International Publication Date 31 July 2003 (31.07.2003)

PCT

(10) International Publication Number WO 03/062284 A3

(51) International Patent Classification<sup>7</sup>: C08F 10/10, 210/12, 4/16, C07F 7/22

(21) International Application Number: PCT/CA03/00067

(22) International Filing Date: 21 January 2003 (21.01.2003)

(25) Filing Language:

**English** 

(26) Publication Language:

English

(30) Priority Data: 2,368,724

21 January 2002 (21.01.2002) CA

(71) Applicant (for all designated States except US): BAYER INC. [CA/CA]; Patent Department, 1265 Vidal St. S., P.O. Box 3001, Sarnia, Ontario N7T 7M2 (CA).

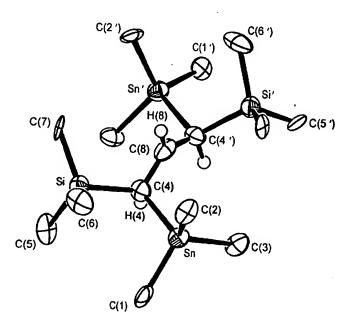
(72) Inventors; and

(75) Inventors/Applicants (for US only): BOCHMANN, Manfred [DE/GB]; 1 Churchfield, Cringleford, Norwich, Norfolk NR4 6UP (GB). GARRATT, Shaun [GB/GB]; 45 Wilberforce Road, Norwich, Norfolk NR5 8FN (GB). SCHORMANN, Mark [DE/GB]; 32 Merton Road, Norwich, Norfolk NR2 3TT (GB).

- (74) Agent: SMART & BIGGAR; 55 Metcalfe Street, Suite 900, P.O. Box 2999, Station D, Ottawa, Ontario K1P 5Y6 (CA).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: PROCESS FOR PREPARING ISOBUTYLENE-BASED POLYMERS



(57) Abstract: This invention relates to a metal organic compound, a catalytic composition comprising said metal organic compound, a process for homo- or co-polymerizing isoolefines in the presence of said metal organic compound and a method of stabilizing a compound of the general structure (II)  $[R'HC(CRR'')_2]^{2+}[M_2X_9]^-$ , in which R is a group of the formula  $SiR^1R^2R^3$ , R" is hydrogen, C<sub>1</sub> to C<sub>12</sub> alkyl, a C<sub>6</sub> to C<sub>14</sub> aryl or a C<sub>7</sub> to C<sub>20</sub> alkylaryl, M is Zr or Hf, X is a halogen atom, and R<sup>1</sup> to R<sup>3</sup> is a C<sub>1</sub> to C<sub>12</sub> alkyl group, with a compound R' of the formula M'R<sup>4</sup>R<sup>5</sup>R<sup>6</sup>, in which M' is Si, Ge, Sn or Pb and R<sup>4</sup> to R<sup>6</sup> is a C<sub>1</sub> to C<sub>12</sub> alkyl group as well as a non-coordinating anion of the general structure  $[M_2X_9]^-$  in which M is Zr or Hf and X is a halogen atom.



3/062284 A3